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| APPLICATION NO. | . F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|------------------------|--------|------------|----------------------|---------------------|-----------------|
| 10/075,203 02/14/2002 | | 02/14/2002 | Glen Kaszubski | MAC-003 | 7110 |
| 38157 | 7590 | 12/30/2004 | | EXAMINER | |
| THE GLII | | | . YOON, TAE H | | |
| 925 EUCLI SUITE 900 | |)E | | ART UNIT | PAPER NUMBER |
| CLEVELA | ND, OH | 44115 | 1714 | | |

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|--|--|--|--|--|--|--|
| | | Applicati n No. | Applicant(s) | | | | | |
| | | 10/075,203 | KASZUBSKI ET AL. | | | | | |
| | Office Action Summary | Examin r | Art Unit | | | | | |
| | | Tae H. Yoon | 1714 | | | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| THE - Exte after - If the - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period or tre to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailin ed patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tily within the statutory minimum of thirty (30) dawill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI | mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | |
| 1)🛛 | Responsive to communication(s) filed on 23 N | lovember 2004. | | | | | | |
| 2a)⊠ | This action is FINAL . 2b) This action is non-final. | | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposit | ion of Claims | • | | | | | | |
| 4) 🖂 | Claim(s) 14-57 is/are pending in the application | n. | | | | | | |
| | 4a) Of the above claim(s) 14-23 is/are withdrawn from consideration. | | | | | | | |
| 5)[| Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ | Claim(s) <u>24-57</u> is/are rejected. | | | | | | | |
| · | Claim(s) is/are objected to. | | | | | | | |
| 8)[] | Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Applicat | ion Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | |
| 10)[| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 44)[| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| 11)[| The oath or declaration is objected to by the E | xaminer. Note the attached Oπic | e Action or form PTO-152. | | | | | |
| Pri rity | under 35 U.S.C. § 119 | ~ | | | | | | |
| | Acknowledgment is made of a claim for foreign ☐ All b) ☐ Some * c) ☐ None of: | | a)-(d) or (f). | | | | | |
| | Certified copies of the priority document Certified copies of the priority document | | tion No | | | | | |
| | Copies of the certified copies of the prior | | | | | | | |
| | application from the International Burea | | The Manufacture of Cago | | | | | |
| * (| See the attached detailed Office action for a list | | red. | | | | | |
| | | | | | | | | |
| Attachmer | it(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | | | |
| | ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail D 5) Notice of Informal | Pate Patent Application (PTO-152) | | | | | |
| | er No(s)/Mail Date | 6) Other: | | | | | | |

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A careful correction of the specification is needed. For example, line 12 of page 17 and lines 23 and 29 of page 19 contains "?" which does not make sense.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is NEW MATTER rejection. The recited surface area of from 75 to less than 250 m²/gram for a clear filler of claim 43 does not have support in the specification contrary to applicant's statement in the table of remarks. The bottom of page 6 states that clear filler particles have an average surface area less than about 250 m²/gram, more preferably less than about 150 m²/gram and most preferably less than about 75 m²/gram. Also, the recitation of the filler alone in claim 52 does not have support in the specification (or broader than the actual invention) since the example 2 showing the recited surface area teaches fumed amorphous silica filler.

The claim 49 is not commensurate in scope with an enabling disclosure until the named groups for "substituted" as described in the instant specification, are recited in the claims for "substituted". If there are no examples for "substituted", in the instant

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specification, "substituted" must be cancelled because the specification is not enabling for the skilled artisan to practice the invention. It would require undue experimentation to determine all of the groups which are encompassed by "substituted" and how to attach these groups to the claimed compound.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 34-36, 39-41 and 43-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited surface area of claim 34 improperly broadens the scope of claim 24 and thus is indefinite.

Improper Markush language is recited in claims 36, 37, 39, 43, 49, 53 and 55, and a proper format is "—the filler selected from the group consisting of A, B, C, ---- and Z". Also, claims 35 and 36 are confusing, and a recitation of "further" in claims 35 and 36 is suggested since the recited fillers would be an additional component.

The recited "calcium carbonate including limestone" of claim 36 is indefinite and cancellation of "including" is suggested. The recited "solid and hollow ceramic microspheres hollow spheres" of claim 36 is confusing and thus is indefinite.

The recited "any vinyl alkoxysilane" of claims 39 and 55 is indefinite absent particular substituents or functional groups.

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The recited "the adhesion promoter" of claims 40 and 56 and "the anti-oxidant" of claims 41 and 56 lack antecedent basis.

It is unclear whether the recited "fumed silica" and "clear filler" of claim 43 are same or not and thus are confusing since the bottom page 6 of the specification teaches that the clear filler is the fumed silica and since the recited surface area is overlapped and extended over each other. It is unclear whether the recited filler of claim 51 is an additional component or the fumed silica of claim 43. It is unclear whether the recited fillers of claim 52 are the fumed silica and/or the clear filler.

Claim 57 is a duplicate of claim 41.

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 24-51 and 53-57 are rejected under 35 U.S.C. 103(a) as obvious over Product Brochure "MS polymer Silyl" of Kaneka Corp. in view of Staiger et al (US 5,304,621).

Said Product Brochure teaches the instant formulation #105 (composition) in table of page 5, and it inherently possesses the instant viscosity and Tg. Said MS

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polymer Silyl meeting the instant (co)polymer having reactive silicon end groups is taught at page 2 wherein the viscosity is also seen (1 Pa • s equals 1,000 centipoise). Said MS polymer has Tg of about – 60 ° C (page 4) and thus said formulation in table of page 5 would have the instant viscosity.

The instant invention further recites employing clear filler such as fumed amorphous silica and dehydrating agents such as zeolite over Product Brochure. However, said Product Brochure teaches employing various fillers at the bottom of page 1, and the use of said fumed amorphous silica in moisture curable composition comprising a (co)polymer having reactive silicon end groups is well known as taught by Staiger et al (example 13 and col. 7, lines 55-64 wherein BET surface area of up to 50 m²/gram and above 50 m²/gram is taught) and the fumed silica is amorphous. For example, Staiger et al teach fumed silica, HDK H 15 at col. 18, line 7, which is also taught instant page 6, line 22. Staiger et al also teach dehydrating agents such as zeolite (molecular sieves) at col. 8, line 37).

It would have been obvious to one skilled in the art at the time of invention to utilize fumed silica (and molecular sieves) of Staiger et al in a composition of Kaneka Product Brochure as a filler since said Product Brochure teaches employing various fillers and since the use of said fumed amorphous silica in moisture curable composition having (co)polymer having reactive silicon end groups is well known, and the recited amount of filler would be obvious to one skilled in the art since the use of a large amount of fillers in order to reduce the cost of product and to improve physical

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properties of product is a routine practice in the art as taught by Staiger et al and Kaneka Product Brochure teaches the use of a dehydrating agent.

Claims 24-51 and 53-57 are rejected under 35 U.S.C. 103(a) as obvious over Product Brochure "MS polymer Silyl" of Kaneka Corp. in view of Staiger et al (US 5,304,621), and further in view of Bennington (US 2004/0116547 A1).

The instant invention further recites particular dehydrating agents such as vinyl trimethoxysilane over Kaneka Product Brochure. However, the use of such dehydrating agents in organosiloxane composition is well known as evidenced by Bennington ([0031]).

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known dehydrating agents such as vinyl trimethoxysilane taught by Bennington in Kaneka Product Brochure and Staiger et al thereof since Kaneka Product Brochure teaches employing dehydrating agents.

Claims 24-30, 34, 36-38, 40, 42-50, 53, 54 and 56 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Imai et al (US 4,760,123).

Imai et al teach the instant composition in examples 1, 3 and 4 wherein the fumed silica having a surface area of 200 m²/gram is seen, and said composition inherently possesses the instantly recited physical properties. Said surface area of 200 m²/gram meets the instantly recited less than 200 m²/gram since such surface areas

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are within the error range of a measurement. At least one of silanes in examples such as amino group containing silane inherently meets the instant adhesion promoter.

Various amounts of fillers encompassing the instant amount and other additives are taught at col. 8, lines 30-40. Thus, the instant invention lacks novelty.

Claims 24-30, 34, 36-38, 40-50, 53, 54, 56 and 57 are rejected under 35 U.S.C. 103(a) as obvious over Imai et al (US 4,760,123).

The instant invention further recites an amount of the antioxidant over Imai et al who teach UV-ray intercepting agent at col. 8, line 38.

It would have been obvious to one skilled in the art at the time of invention to utilize the instant amount of the antioxidant in Imai et al since the use of a small amount of the antioxidant is a routine practice in the art.

Claims 24-34, 36-38, 40-51, 53, 54, 56 and 57 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Staiger et al (US 5,304,621).

Rejection is maintained for reason of record and following response.

The instant composition is also taught at cols. 7, 8 and 12.

Claim 52 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraph, set forth in this Office action, and if

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rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tae H Yoon
Primary Examiner
Art Unit 1714

THY/December 24, 2004